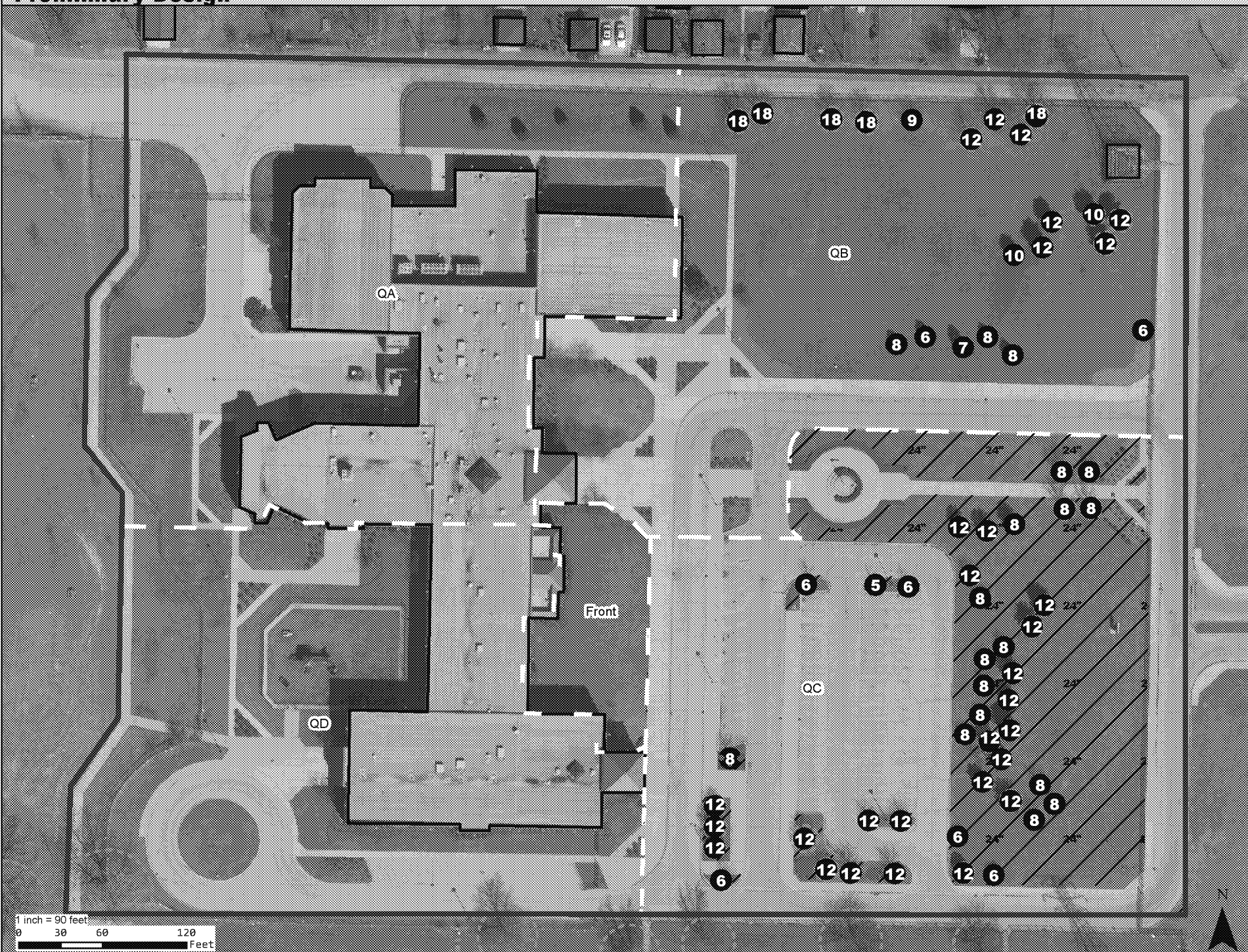


Preliminary Design



Sample Data

Address	Native Sample ID	Sample Type	Analysis Method	Preparation Method	Units	As 0-6	As 6-12	As 12-18	As 18-24	As 24-30	Pb 0-6	Pb 6-12	Pb 12-18	Pb 18-24	Pb 24-30
455 E 148th St Front		Composite - Front yard	XRF	Method	mg/kg	ND	ND				74	47			
455 E 148th St QA		Field Duplicate	XRF	Method	mg/kg					ND					56
455 E 148th St QA		School/Park - Quadrant A	XRF	Method	mg/kg	8	11	ND	ND	ND	75	73	58	44	51
455 E 148th St QB		School/Park - Quadrant B	XRF	Method	mg/kg	ND	ND	ND	ND	24	48	48	91	80	449
455 E 148th St QC		Field Duplicate	XRF	Method	mg/kg			ND					139		
455 E 148th St QC		School/Park - Quadrant C	ICP Metals (TAL)	METHOD	mg/kg	11	8		11		350	230		810	
455 E 148th St QC		School/Park - Quadrant C	XRF	Method	mg/kg	17	23	ND	ND	ND	447	340	215	488	220
455 E 148th St QD		School/Park - Quadrant D	XRF	Method	mg/kg	ND	ND	ND			72	85	39		

Notes

Sampling Notes

QA: 1: native @ 11" 2: native @ 12" 3: native @ 10" 4: 30"+ 5: native @ 20"

QB: 1: native @ 16" 2: native @ 26" 3: native @ 9" 4: refusal @ 20" 5: refusal @ 28"

QC: 1: native @ 9" 2: native @ 13" 3: 30"+ 4: refusal @ 24" 5: refusal @ 21"

QD: 1: native @ 13" 2: native @ 10" 3: refusal @ 18" 4: native @ 12" 5: native @ 18"

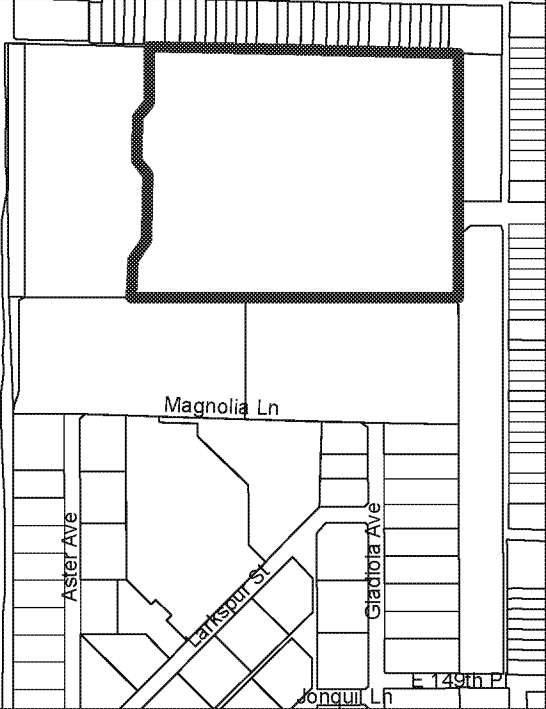
Design Notes

Quadrant A requires no remediation.
Quadrant B requires no remediation.
Excavation depth is 24 inches for Quadrant C.
Quadrant D requires no remediation.

All material in Quadrant C is considered Type-1 waste.

Type-1 waste fails CG criteria.
Type-2 waste fails TC criteria.

Zone 1



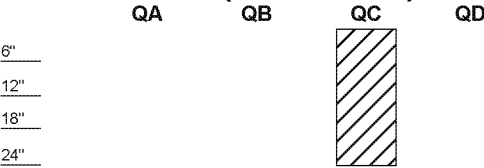
Design Information

Access agreement: 12/10/2009
Date sampled:
QA: 5/1/2015 9:15:00 AM QC: 5/1/2015 11:00:00 AM
QB: 5/1/2015 9:45:00 AM QD: 5/1/2015 8:30:00 AM
F: 8/10/2015 9:00:00 AM
Date restoration agreement:

Quantities

	Units	QA	QB	QC	QD
Type-1	cu yd	0	0	3917	0
Type-2	cu yd	0	0	0	0
Total	cu yd	0	0	3917	0
Sod	sq yd	0	0	5875	0
Barrier		No	No	No	No

Cross Section (not to scale)



Legend

- Property Boundary
- Yard Boundary
- Only Type-1 Waste Present
- Type-2 Waste Present
- Visual Barrier
- START Remediated to 24"
- Tree (Trunk Diameter in Inches)
- Tree Canopy
- Bushes

Revisions/Review

#	Date	Drawn By	QC'd By	Date

US SMELTER & LEAD REFINERY
LAKE COUNTY, EAST CHICAGO, INDIANA

455 148TH ST
Parcel # 450328351043000024

EPA REGION 5 RAC 2 Date Created: 5/5/2016